

carbon thereof, and when thereafter cooled of closely adhering to it. In reaching this decision, the Court relied on a decision by the Supreme Court that "a filament for electric incandescent lamps or other devices, composed substantially of tungsten and made up of mainly of a large number of comparatively large grains of such size and contour as to prevent substantial sagging and offsetting during a normal or commercially useful life for such lamp or other device" was indefinite.

Applicants note that the filament claims required only a single compound. Similarly, the alloy in Koebel required only three compounds. In contrast, the present invention requires an alloy comprise of ten different elements. Furthermore, the present specification provides an extensive teaching to support various ranges for each component and includes numerous examples describing the invention. Accordingly, Koebel does not stand for the presumption that an alloy composition must include ranges for the constituents to be definite. Rather, Koebel holds that when only two examples are provided, and the claims are directed to only three components, the primary restriction coming in the form of functional language, indefiniteness arises. Since the present claims are directed to ten different elements, and the present specification provides an extensive disclosure on the composition, the present case is not analogous to the Court's decision in Koebel and withdrawal of the rejection is respectfully requested.

Claim 1 is rejected as indefinite based on an allegation that a steel alloy must contain at least 50% iron. Applicant has deleted the term "steel".

Claim 36 is rejected because there is no antecedent basis for "selected element". Applicant has amended claim 36 to address this informality.

Claim 1 is rejected under 35 U.S.C. §102b as being anticipated by Wilhelmsson. Applicant respectfully traverses.

Applicant has amended claim 1 to require that the composition be substantially free of silicon. In contrast, Wilhelmsson

requires 0.05 to 1.0 percent silicon. Accordingly, Wilhelmsson does not anticipate the present invention. Furthermore, Wilhelmsson does not suggest elimination of silicon from the composition. Therefore, claim 1 is not suggested by Wilhelmsson either. In this regard, while the Examiner contends that the claimed "future" use in a molten zinc or molten aluminum environment is entitled to no weight, the substantial absence of silicon is crucial to such an environment. Accordingly, this newly added limitation distinguishes the preset invention over the Wilhelmsson reference and withdrawal of the rejection is respectfully requested.

Claims 2-12 and 34-39 are rejected as unpatentable over Wilhelmsson, Neuhausser, Culling, Crook or Way. The Examiner states that each reference teaches an alloy material with constituents whose weight ranges overlap the cited claims. Applicant respectfully traverses.

As stated above Wilhelmsson does not teach a composition substantially free of silicon. In this regard, there is no overlap of ranges as suggested by the Examiner. Furthermore, the Examiner has not supplied any motivation for the skilled artisan to eliminate silicon. In addition, Applicant claims (claim 10) greater than 0 to 5% by weight boron while Wilhelmsson teaches  $<.008$ . Accordingly, there is no overlap which suggests the present invention. Therefore, withdrawal of the rejection in view of Wilhelmsson is respectfully requested.

With respect to newly added claims 41-49, Applicant notes that Wilhelmsson does not teach a combined vanadium, tungsten, molybdenum content of greater than 12 percent; does not teach molybdenum in excess of 2 percent; does not teach vanadium in excess of 4 percent, does not teach nickel less than 26 percent; does not teach carbon greater than 1.6 percent, and does not teach a composition substantially free of titanium. Accordingly, in each of these respects, Wilhelmsson does not overlap the presently claimed invention. Furthermore, the Examiner has not provided any evidence or any reason why the skilled artisan would modify Wilhelmsson away from its direct teachings to achieve Applicant's claimed invention. With respect to

Malagari, a decision on obviousness was not reached solely because there was overlap of ranges. Rather, the Court stated the claimed range of carbon touches that in the "typical preferred range of the reference". In this regard, the presently claimed invention does not touch the preferences of Wilhelmsson or the other applied references. In fact, nearly every element in Applicant's claimed invention comprises substantially different ranges from Wilhelmsson.

With respect to Neuhausser, 3 to 6 percent silicon (see column 5, line 62) is used. Furthermore, Neuhausser does not include at least 12 percent by weight of the combined vanadium, tungsten, molybdenum. In fact, a primary reason this total is not reached is because the vanadium composition is not greater than 4 percent. Furthermore, Neuhausser is not substantially free of titanium (see the example). Furthermore, Neuhausser does not teach boron nor require the presence of cobalt or niobium.

Turning next to Culling, Applicant notes that again silicon is provided. In fact, in the examples of Table III, IV and XVIII each include silicon. Furthermore, Applicant notes that the total of the combined vanadium, tungsten, molybdenum is not in excess of 12 percent. In addition, the molybdenum and vanadium ranges are well below the presently claimed greater than 2 and greater than 4 percent, respectively. Similarly, the compounds are not free of titanium nor do the compounds contain greater than 1.6 percent carbon.

With respect to Crook, Applicant notes that the disclosed compositions include a substantial quantity of silicon.

With respect to Way, Applicant notes that the disclosed composition does not include niobium. Furthermore, each of the disclosed compositions include a substantial presence of silicon.

In view of the above, Applicant notes that not one of the references relied on by the Examiner overlaps with the presently claimed invention. Accordingly, In re Malagari is not applicable. Similarly, the Examiner has supplied no basis upon which to conclude that the ranges of

the prior art would be modified by the skilled artisan to achieve overlap. In the absence of such motivation, In re Malagari is not all encompassing because the skilled artisan would not achieve the presently claimed invention and withdrawal of the rejection is therefore respectfully requested.

If any fee is due in conjunction with the filing of this response, Applicant authorizes deduction of that fee from Deposit Account No. 06-0308. In view of the above, Applicant submits that this application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,

FAY, SHARPE, BEALL, FAGAN,  
MINNICH & McKEE



Scott A. McCollister

CERTIFICATE OF MAILING

I hereby certify that this Amendment is being deposited with the United States Postal Service as first class mail addressed to: Assistant Commissioner For Patents, Washington, D.C. 20231, on September 22, 1998.

